Before the Federal Communications Commission Washington D.C. 20554

In the Matter of)	
)	
Advanced Television Systems)	MB Docket No. 87-268
And Their Impact on the)	
Existing Television Broadcast)	
Service)	

To: The Commission

PETITION FOR RECONSIDERATION

Ackerley Broadcasting Operations, LLC ("Ackerley"), by its attorneys, hereby submits this Petition for Reconsideration of the Seventh Report and Order in the above referenced docket. Ackerley requests a change in the channel allotted to KTVF(DT) (Facility ID 49621), Fairbanks, Alaska ("KTVF" or the "Station) for post-transition digital television ("DTV") operations from Channel 11 to Channel 26.

Currently, KTVF operates on NTSC Channel 11 and DTV Channel 26. The Station elected to return to Channel 11 for post-transition DTV operations (FCC File No. BFRECT-20050202ACB).

KTVF is located near Eielson Air Force Base ("Eielson AFB"). Eielson AFB is the home of RED FLAG- Alaska, a program that provides a multi-force simulated air combat exercise. At least four times a year, Eielson AFB hosts RED FLAG – Alaska missions. During these two-week long missions, air combat troops from around the world meet at Eielson AFB to engage in simulated air combat, involving up to 70 jet fighters operating in the same airspace at any one time.¹

¹ Fact Sheet: Red Flag – Alaska, <u>www.eielson.af.mil/library/factsheets/factsheet.asp</u>

KTVF has experienced periodic interference to its Channel 11 signal during these training exercises in the past. However, this summer during two separate two-week training missions, KTVF's analog operations on Channel 11 experienced massive interference. During the May 31 –June 15 training exercise, there was sporadic interference throughout the day – typically beginning at 8 a.m. and ending at 7 p.m. The interference during this mission consisted of lines flashing through the video intermittently and a jumpy and jittery picture. During the July 12-27 training mission, the interference increased significantly. The Station continued to suffer the same type of interference as in June but the frequency increased to the point where the Station's signal was never completely clear. Additionally, several times each day during the entire twoweek training exercise, the video began to disappear completely for 2-3 minutes at a time. Again during this second training exercise, the interference began at 8 a.m. and ended by 7 p.m., corresponding to the time the fighter jets were in the air each day. Significantly, all interference ended when the training missions ended. There have been no further training missions this Fall and the Station has been interference-free since the July mission ended.

During the July 12-27 training mission, the Station's Director of Engineering analyzed the Channel 11 signal with a spectrum analyzer and recognized the fact that radar pulses were blanketing the entire 200 MHz band. *See Declaration of David S. Castor* Director of Engineering – KTVF, <u>Attachment 1</u>. Channel 11 is located at 199.26 MHz, very close to the 200MHz range employed by various military organizations for radar equipment. *See Declaration of David S. Castor*, <u>Attachment 1</u>. The interference

experienced by the Station corresponded to the times of the military exercises - 8:00 am to 7:00 pm.

Station management contacted the Commander of the 345 Fighter Wing at Eielson AFB regarding these interference problems. The Commander was evasive and unresponsive to the Station's concerns. The Station was referred to the Frequency Manager at Headquarters - Alaska Command located at Elmendorf Air Force Base ("Elmendorf AFB"). The Frequency Manager at Elmendorf AFB acknowledged that the interference suffered by KTVF could have originated with the foreign militaries participating in the RED FLAG exercises. He explained that although foreign militaries should disclose the type of radar equipment they are using and restrict such radar frequencies to approved ranges, in the heat of mock combat, these rules are sometimes broken. However, he further advised that if the interference was originating with unauthorized radar devices used by foreign militaries during these exercises, there was little that could be done to prevent it. In practical terms, this means that depending on which foreign military is participating in training exercises, and whether they follow the rules regarding use of radar, KTVF could experience interference during any RED FLAG – Alaska exercise and the U.S. Air Force will not be able to prevent it.

Thus, while KTVF is committed to taking all necessary steps to protect its continued use of Channel 11, the Station is concerned that by remaining on Channel 11 post-transition, it will be unable to provide a consistently interference-free signal to its viewers. KTVF can, and should it become necessary will, pursue this issue through the appropriate chain of military procedures.

However, a simpler solution is for the digital operations of KTVF to remain on Channel 26 following the end of the digital transition, rather than returning to Channel 11. Channel 26 is located at a higher frequency, 543.25 MHz, and is therefore not susceptible to interference from radar and thus would not be at risk during the RED FLAG – Alaska exercises. Notably, Channel 26 has remained interference-free during each training mission.

Allowing KTVF to remain on Channel 26 for its post-transition digital operations would serve the public interest by ensuring uninterrupted service to the public.

Moreover, allowing KTVF to remain on Channel 26 for its post-transition DTV operations would completely avoid any disruption in service to the Station's analog and digital viewers in the final months leading up to the February 17, 2009 digital transition deadline. The Commission in the Third Periodic Review stated that it was "critically important that analog over-the-air viewers who obtained the necessary digital receivers ...[be] able to receive DTV service over-the-air on and after the transition date." By remaining on Channel 26, absolutely no construction is necessary for KTVF to complete the transition. Instead, KTVF can simply turn off its analog Channel 11 facilities and continue operating digitally on its currently licensed Channel 26. The transition will therefore be completely seamless for KTVF's viewers.

Significantly, the continued post-transition use of Channel 26 by KTVF will not cause any interference to other stations. *See Technical Exhibit in Support of Petition for*

² Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rulemaking, MB Docket No. 07-91, FCC 07-70, ¶46, released May 18, 2007 ("Third Periodic Review").

Reconsideration, prepared by Charles A. Cooper of du Treil, Lundin & Rackley, Inc.

Attachment 2.

Therefore, in order to avoid the distinct possibility of repeated and severe interference on Channel 11 from the RED FLAG-Alaska operations, Ackerley respectfully requests that the Commission allow it to change the post-transition channel assigned to KTVF from Channel 11 to Channel 26 and modify the DTV Table of Allotments, Appendix B accordingly to reflect KTVF's currently licensed operations on Channel 26.

Respectfully Submitted,

ACKERLEY BROADCASTING OPERATIONS, LLC

By:

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202.719.7000

Dated: October 25, 2007

Attachment 1

DECLARATION OF DAVID S. CASTOR

I, David S. Castor hereby declare under penalty of perjury that the following is true and correct:

- 1. I am Director of Engineering for KTVF(TV), Fairbanks, Alaska.
- 2. On or about late-May to mid-June 2007 KTVF began experiencing intermittent interference to KTVF's analog Channel 11 signal. This interference manifested as lines of noise in the video. The signal was disrupted, but viewable. The interference occurred only during the day, primarily from 8 a.m. until 7 p.m. In mid-June, the interference ended.
- 3. On or about mid-July to late-July 2007, the KTVF analog Channel 11 signal again began to suffer from interference. During this two-week period, the interference was significant. The interference again manifested as lines of noise in the video. Further, the signal disappeared altogether several times each day. In late-July, the interference ended.
- 4. While working to diagnose the source of this interference, I analyzed the Channel 11 analog signal using a Tektronix spectrum analyzer in the 200Mhz range. During this analysis, the analyzer showed electronic signals that appeared to be radar pulses. These pulses blanketed the Channel 11 spectrum and were higher in amplitude than the Channel 11 frequency of 199.26Mhz.
- 5. My background includes four years of service in the United States Air Force as a 30352 heavy ground radar repairmen. During that time I was stationed at the 655th Radar Squadron at Dry Hill Air Force Station at Watertown, New York. I served as a crew chief at the AN-FPS26A height finder tower. Our mission was to repair the radar systems that were vital to national security. I have the knowledge and experience to recognize radar pulses.
- 6. The correlation between the timing of the Red Flag Alaska training exercises and the interference suffered by KTVF's Channel 11 caused me to do further research. My research showed that the timing of the Channel 11 interference corresponded closely to the timing of the Red Flag Alaska training exercises.
- 7. The General Manager of KTVF and I contacted the Commander of the 345 Fighter Wing, Eielson Air Force Base regarding the interference experienced by Channel 11 during these Red Flag Alaska exercises. The Commander was dismissive of our concerns and unwilling to consider the possibility that the interference could have originated from Eielson Air Force Base. However, he referred us to the Frequency Manager at Headquarters, Alaska Command, located at Elmendorf Air Force Base.
- 8. The Frequency Manager at Headquarters, Alaska Command readily agreed that the interference could have originated with the Red Flag Alaska training exercises. He explained that the training exercises include foreign militaries from around the world. While the visiting military forces are notified as to the frequencies that are available for use, the U.S. hosts have no right to inspect or remove any equipment which operates on unapproved frequencies.

He also acknowledged that in the heat of mock battle, it was possible that unapproved radar equipment and frequencies had been used and may be used in future training exercises.

- 9. KTVF's digital facility on Channel 26 suffered no disruption from interference during the time periods referenced above.
- 10. I have reviewed the foregoing Petition for Reconsideration and, to the best of my knowledge, information and belief formed after reasonably inquiry, it is well grounded in fact.

David S. Castor

Attachment 2

TECHNICAL EXHIBIT IN SUPPORT OF PETITION FOR RECONSIDERATION IN MB DOCKET NO. 87-268 ADVANCED TELEVISION SYSTEMS AND THEIR IMPACT UPON THE EXISTING TELEVISION BROADCAST SERVICE TELEVISION STATION KTVF FAIRBANKS, ALASKA

Technical Exhibit

This technical exhibit was prepared in support of the Petition for Reconsideration for Television Station KTVF. KTVF operates on Channel 26 DTV, Channel 11 Analog at Fairbanks, Alaska. KTVF has been ordered back to its analog Channel 11 for post-transition operation. KTVF requests that the Commission substitute its licensed digital Channel 26 for its final DTV allotment.

Channel 26 Table of Allotment Parameters

It is requested that the Commission modify the proposed Appendix B DTV Table of Allotment specifications to the following:

Facility	Sta	ate & City	NTSC	DTV								
ID	[Chan	Chan	ERP	HAAT	Antenna	Latitude	Longitude	Area	Population	Percent
					(kW)	(m)	ID	(DDMMSS)	(DDDMMSS)	(sq	(thousand)	IX
										km)		Received
49621	AK	Fairbanks	11	26	12	-11	44637 (110° Rotation)	645036	1474248	3842	81	0.0

Consulting Engineers

Page 2 Fairbanks, Alaska

Certification

KTVF certified on its FCC Form 381, Pre-Election Certification Form¹, that it will operate its post-transition DTV station pursuant to its licensed DTV facility.² The herein proposed Channel 26 allotment facility has the same parameters as its licensed DTV facility. Therefore, there is no extension of the allotment noise-limited contour beyond its certified noise-limited contour.

It is furthermore noted that the proposed Channel 26 post-transition allotment does not create any interference to other post-transition stations based upon the 2000 Census. Figure 1 is a tabulation of the allocation study performed for the Channel 26 post-transition facility.

Charles A. Cooper

du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237 941.329.6000 CHARLES@DLR.COM

October 9, 2007

¹ See FCC File Number: BCERCT-20041103AGL.

² See FCC File Number: BLCDT-20030821AAY.

TECHNICAL EXHIBIT

IN SUPPORT OF PETITION FOR RECONSIDERATION IN MB DOCKET NO. 87-268 ADVANCED TELEVISION SYSTEMS AND THEIR IMPACT UPON THE EXISTING TELEVISION BROADCAST SERVICE TELEVISION STATION KTVF FAIRBANKS, ALASKA

OET-69 Analysis

Percent allowed new interference: 0.000
Percent allowed new interference to Class A: 0.000
Census data selected 2000

Post Transition Data Base Selected /space/software/cdbs/tvdb.sff_B TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 10-09-2007 Time: 15:07:32

Record Selected for Analysis

KTVF USERRECORD-01 FAIRBANKS AK US Channel 26 ERP 12. kW HAAT 34. m RCAMSL 00171 m Latitude 064-50-36 Longitude 0147-42-48 Status APP Zone 2 Border Dir Antenna Make CDB Model 00000000044637 Beam tilt N Ref Azimuth 110. Last update Cutoff date Docket Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

	mn n	7 7 7 7 77	41.0 dBu F(50,90)
Azimuth	ERP	HAAT	41.0 GBG F (50,90)
(Deg)	(kW)	(m)	(km)
0.0	4.451	33.0	34.8
45.0	7.556	33.0	37.1
90.0	11.478	36.1	39.9
135.0	11.163	33.2	38.8
180.0	7.059	38.7	38.6
225.0	4.400	41.0	37.2
270.0	5.211	33.0	35.5
315.0	5.078	33.0	35.4

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

No spacing violations found to other full service stations

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountian

Proposed facility is within the Canadian coordination distance Distance to border = 316.6km

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

ARN

Proposed Station

Call Channel City/State

FAIRBANKS AK USERRECORD01 26

Stations Potentially Affected by Proposed Station

Chan Call City/State Dist(km) Status Application Ref. No.

Analysis of Interference to Affected Station 1

Analysis of current record

Call City/State Application Ref. No. Channel KTVF FAIRBANKS AK USERRECORD-01

Stations Potentially Affecting This Station

Chan Call Dist(km) Status Application Ref. No. City/State

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1

Before Analysis

USERRECORD01 APP Results for: 26A AK FAIRBANKS HAAT 34.0 m, ATV ERP 12.0 kW

within Noise Limited Contour 81705 AFEA (sq km) not affected by trees in not affected by terrain losses 81274 3841.9 0.0 lost to NTSC IX lost to additional IX by ATV 0 0.0 lost to ATV IX only 0 0.0 0 0.0 lost to all IX

Potential Interfering Stations Included in above Scenario

FINISHED FINISHED FINISHED FINISHED FINISHED